# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,565	09/01/2005	Takuhiro Kondo	GOT 203NP	5509
23995 7590 11/19/2007 RABIN & Berdo, PC 1101 14TH STREET, NW			EXAMINER TORRES, MELANIE	
·	, 50 20005		3683	
			MAIL DATE	DELIVERY MODE
			11/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)			
	10/516,565	KONDO ET AL.			
Office Action Summary	Examiner	Art Unit			
	Melanie Torres	3683			
The MAILING DATE of this communication app		t with the correspondence address			
Period for Reply	•				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be a vailable under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of the provision	ATE OF THIS COMMU 36(a). In no event, however, ma will apply and will expire SIX (6) No, cause the application to become	NICATION. y a reply be timely filed MONTHS from the mailing date of this communication. e ABANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 28 A	ugust 2007.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 (	C.D. 11, 453 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1</u> is/are rejected.					
7) Claim(s) is/are objected to.		•			
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
9) The specification is objected to by the Examine	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abe	yance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	xaminer. Note the attac	hed Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119	· .				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C	C. § 119(a)-(d) or (f).			
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the prio	rity documents have be	een received in this National Stage			
application from the International Burea					
* See the attached detailed Office action for a list of the certified copies not received.					
		•			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		ew Summary (PTO-413) No(s)/Mail Date			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		of Informal Patent Application			

Application/Control Number:

10/516,565 Art Unit: 3683

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patil et al. (US 5,070,284) in view of Takegawa (JP 62004937).

Patil et al. teach an electromagnetic shock absorber comprising: a shock absorber body (104) which makes a telescopic motion in response to an input from outside; a ball screw mechanism which is arranged in the shock absorber body, converts the telescopic motion into a rotary motion, and is composed of a ball nut and a screw shaft (106, 112); and a motor (104) which is provided coaxially with the shock absorber body and generates electromagnetic resistance to oppose against the rotary motion to be input into a rotary shaft of the motor, wherein the screw shaft and the rotary shaft of the motor are constituted as one united shaft member, wherein the shock absorber body has an external cylinder, and an internal cylinder to be slidably inserted into the external cylinder, and the motor is coaxially connected with an upper part of the external cylinder, wherein the ball nut of the ball screw mechanism is fixed to an upper part of the internal cylinder, and the screw shaft which is united with the rotary shaft of the motor is spirally engaged with the ball nut, wherein the screw shaft and the rotary shaft

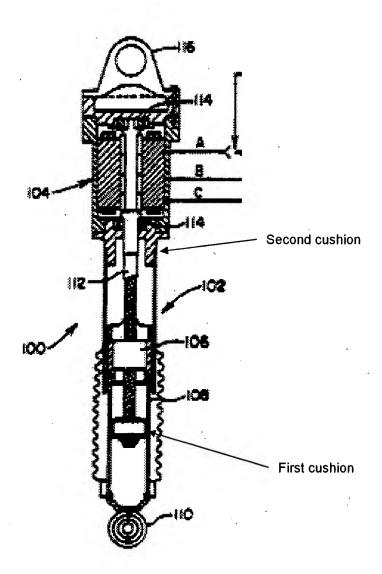
Page 3

Application/Control Number:

10/516,565

Art Unit: 3683

are connected by an intermediate shaft section which is rotatably supported by an inside wall of the external cylinder through a bearing, wherein a first cushion member which comes into contact with a lower surface of the ball nut at a maximum descent stroke position of the internal cylinder is installed at a lower end of the screw shaft, and wherein a second cushion member which comes into contact with an upper surface of the ball nut at a maximum ascent stroke position of the internal cylinder is installed at a lower surface of the bearing. (See below)



Patil et al. do not teach wherein a diameter of the intermediate shaft section is thinner than that of the screw shaft, and a diameter of the rotary shaft is thinner than that of the intermediate shaft section. Takegawa teach wherein a diameter of the intermediate shaft section is thinner than that of the screw shaft, and a diameter of the rotary shaft is thinner than that of the intermediate shaft section. (Figure 3)

Because both Patil et al. and Takegawa teach screw shafts, intermediate shafts and rotary shafts which are connected, it would have been obvious to one having ordinary skill in the art to provide the shaft of varying diameters as taught by Takegawa since the operation of the shock absorber is in no way dependent on the shaft diameters and one skilled in the art would have known to substitute one shaft for another to achieve the predictable result of reducing the number of components and production costs.

## Response to Arguments

3. Applicant's arguments with respect to claim 1 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is

10/516,565

Art Unit: 3683

(571)272-7127. The examiner can normally be reached on Monday, 6:00 AM - 4:30 PM, Tuesday, 6:00 - 12:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571)272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MT November 13, 2007

> Nesanie Torres Drimary Examiner